

Docket: PHB 34,386  
Application: 09/653,782

### REMARKS

This amendment is in response to the Examiner's Office Action dated November 16, 2005. Claim 1 has been amended solely for clarification purposes. Reconsideration of this application is respectfully requested in view of the foregoing amendment and the remarks that follow.

### STATUS OF CLAIMS

Claims 1-5, 8, 10, and 11 are pending.

Claims 1-5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over US 4,977,611 (Maru) in view of US 5,369,798 (Lee).

Claims 8 and 10-11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over US 4,977,611 (Maru) in view of US 5,144,296 (Deluca et al).

Claims 10-11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over US 4,977,611 (Maru) in view of US 5,144,296 (Deluca et al), as applied in claim 8 above, and further in view of US 6,219,540 (Besharat et al).

### REJECTIONS UNDER 35 U.S.C. § 103(a)

Claims 1-5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over US 4,977,611 (Maru) in view of US 5,369,798 (Lee). This rejection is respectfully traversed.

Independent claim 1 of the present application claims the limitation of "*detecting the presence of a carrier signal*, such that the receiver is de-energized substantially immediately without waiting for expiration of any time period if the presence of the carrier signal is not detected" (*emphasis added*). Similarly, independent claim 4 claims "means for de-energizing the

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receiver substantially immediately without waiting for expiration of any time period *if the presence of a signal is not detected?* (emphasis added).

In contrast, Maru detects the presence of data, which is not at all the same thing as detecting the presence of a signal. In column 4, lines 48-53 of Maru it is stated that "when no data is found on any of the channels upon the lapse of a predetermined period of time, e.g., 60 seconds after the channel scanning has been started at the time  $t_0$ , the saving scanning is initiated. The supply of power to the RX section 3, FIG. 1, is interrupted at a time  $t_5$  and continuing onward" and at lines 57-61 it is stated that "when no data is found on any of the control channels #23 to #43 and #323 to #343 during one checking cycle, the power supply is interrupted at a time  $t_7$  so as to start a battery saving mode of operation. In the saving mode, the power supply and the channel scanning are each interrupted for a predetermined period of time such as 9 seconds." (emphasis added).

It can be seen from the passages reproduced above that Maru interrupts the power supply when no data is found. Whilst data cannot be found in a radio system when there is no signal, the reverse is not true. That is to say that a signal may well exist that carries no data. Hence, stating that "no data is found" does not mean that "a signal is not detected" as claimed.

The abstract in Maru also states in lines 3-5 that "The apparatus selects a channel for its use on a basis of the strength of the electrical fields on the various channels", but this does not specify detecting presence or absence per se.

Hence, Maru fails to teach or suggest detecting the presence of a signal, but merely teaches detecting the presence of data that may be carried by a signal, and also teaches selecting a channel based upon field strength.

In relation to claim 2, nor is there any indication anywhere in Maru that the output of the field strength detector 60 is used to control battery saving, only that it is fed to CPU 5, apparently

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so that those channels having the strongest and second strongest field strengths can be stored in step 3B.

Lee also fails to cure the deficiencies of Maru. Column 2, lines 3-5 of Lee, cited in the Office Action, state that "...the portable radio telephone is switched off when the *number of the fails* equals the given value" (*emphasis added*). The "number of the fails" in Lee is a measure of signal quality, not an indication of the presence of a signal.

For at least these reasons, claims 1 and 4 are allowable over the combination of Maru and Lee, as are claims 2, 3 and 5 that depend therefrom.

Claims 8 and 10-11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over US 4,977,611 (Maru) in view of US 5,144,296 (DeLuca et al). This rejection is respectfully traversed.

Independent claim 8 of the present application includes the limitation "*if the carrier is determined to be present*, to then maintain the receiver in the energized state until a determination is made as to whether acceptable signal quality has been obtained, and to de-energize the receiver substantially immediately without waiting for expiration of any time period *if the carrier is determined to be present* and the signal quality is not acceptable" (*emphasis added*).

As previously discussed, *supra*, Maru does not determine if a carrier is present. DeLuca also fails to teach or suggest such a feature. The Office Action relies on the references to analogize "strong signal" and "weak signal" in the abstract of DeLuca for this feature, but this abstract actually states:

"An adaptive battery saving controller for a battery powered communication receiver utilizes a signal quality detector for detecting strong signal and weak signal conditions. During strong signal conditions, the adaptive

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battery saving controller is capable of suspending the supply of power to the receiver during the reception of message code words not intended for the communication receiver. The adaptive battery saving controller is also capable of suspending the supply of power to the receiver following the detection of a hard address error. During weak signal conditions, the adaptive battery saving controller reverts to conventional battery saving techniques.”

The detection of either strong or weak signal conditions does not amount to detection of the presence of a carrier, only to detection of relative amplitude. Hence this feature of the present claim 8 is not taught or suggested by either Maru or DeLuca, whether taken separately or in combination. For at least this reason, claim 8, and claims 10 and 11 that depend therefrom, are allowable.

Claims 10-11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over US 4,977,611 (Maru) in view of US 5,144,296 (DeLuca et al), as applied in claim 8 above, and further in view of US 6,219,540 (Besharat et al). This rejection is respectfully traversed.

Claims 10 and 11 are dependent from claim 8, and are therefore allowable for at least the same reasons that claim 8 is allowable.

In addition, claim 10 recites that “the microprocessor is operable to de-energize the receiver circuit *if the carrier is determined to not be present*, without performing a signal quality determination” (*emphasis added*).

As has already been shown, neither Maru nor DeLuca teaches or suggests determining whether a carrier is present, and nor does Besharat.

The Office Action cites Besharat, column 7, lines 38-42 “Normal operation of the communication device occurs during time interval 712, at which point the signal quality detector 154 detects the absence of an *acceptable* transmission, at which time the out-of-range detection

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signal 113 is generated." (*emphasis added*), i.e. signal quality detector 154 *does not* detect that "the carrier is determined to *not be present*", it merely detects the "absence of an *acceptable* transmission", as the Office Action admits in paragraph 3, lines 7-8. That is, Besharat's signal quality detector 154 may detect a transmission, but one that is not *acceptable*, and still generate out-of-range detection signal 113.

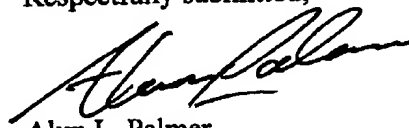
Claim 10 is therefore allowable over the combination of Maru with DeLuca and Besharat for this additional reason. Claim 11 is dependent from claim 10, and is allowable for all the reasons that claim 10 is allowable.

As has been detailed above, none of the references, cited or applied, provide for the specific claimed details of applicants' presently claimed invention, nor renders them obvious. It is believed that this case is in condition for allowance and reconsideration thereof and early issuance is respectfully requested.

As this amendment has been timely filed within the set period of response, no petition for extension of time or associated fee is required. However, the Commissioner is hereby authorized to charge any deficiencies in the fees provided to Deposit Account No. 12-0010.

If it is felt that an interview would expedite prosecution of this application, please do not hesitate to contact applicants' representative at the below number.

Respectfully submitted,



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